

4.4 WETLANDS AND WATERS OF THE UNITED STATES

4.4.1 Waters of the United States

A. NO BUILD ALTERNATIVE

The No Build Alternative would not include construction other than that which is addressed in other environmental documents; therefore, no additional impacts to waters of the United States would occur.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not include any major capital improvements to SR-22. No impacts to waters of the United States would occur.

C. FULL BUILD ALTERNATIVE

The Full Build Alternative includes overcrossings of, or is adjacent to, a number of drainages that are waters of the United States. The majority of these drainages are concrete-lined and therefore do not contain sensitive biological resources. Table 4.4-1 shows potential area of impact for each of these drainages. In the table, permanent impacts refers to the impacts related to permanent changes in the waters of the United States, such as from new or altered structures. Temporary impacts refer to the construction-related impacts such as access roads.

Projects that include physical modification of a “water of the United States” must comply with Section 404 of the Clean Water Act under the jurisdiction of the Corps. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation’s waters. Section 404 regulates activities that result in discharge of dredged, fill, or excavated material into “waters of the United States.” This generally includes any waterway, intermittent stream, man-made wetland, or reservoir. Although the study area supports no wetlands that would be directly affected by the Full Build Alternative (see below), this alternative would result in modification of some soft-bottom channelized drainages. Therefore, the project will need to comply with Section 404 of the Clean Water Act to address impacts on “waters of the United States.” Section 404 permits will be required for the crossings identified below, but coverage under existing Nationwide Permit 14, Linear Transportation Crossings, is anticipated because permanent impacts would not exceed the thresholds for this nationwide permit (0.2 hectare or 0.5 acre), as shown in Table 4.4-1.

Section 401 of the federal Clean Water Act requires that for each permit or license issued by a federal agency, the state is to provide certification that water quality standards and the use of the water will not be impaired by issuance of the federal permit. The state may grant, grant with conditions, waive, or deny certification. Most certifications are issued for a Section 404 permit, so an application for a Section 401 certification is generally filed concurrently with the Section 404 permit application (or request for coverage under a nationwide permit). The state’s Regional Water Quality Control Boards (RWQCBs) issue the certifications. The applicable RWQCB may approve the certification application, passively waive certification by taking no action (generally within 60 days, although extensions are possible), or deny the certification if it is unable to find that the project will comply with water quality standards or other applicable requirements. If the certification is denied, the USACOE cannot issue a Section 404 permit or cover the project under an existing nationwide permit. Because the Full Build Alternative would require coverage under existing Nationwide Permit 14, Linear Transportation Crossings, a Section 401 certification would be required.

**Table 4.4-1
POTENTIAL IMPACTS TO WATERS OF THE UNITED STATES
FULL BUILD ALTERNATIVE**

Water of the U.S.	Impact Description (RCB = reinforced concrete box)	Permanent Impacts		Temporary Impacts	
		Meters (Sq.Ft.)	Hectares (Acres)	Meters (Sq.Ft.)	Hectares (Acres)
Los Alamitos Channel	No impact.	---	---	---	---
Katella Storm Channel	No impact.	---	---	---	---
Kempton Storm Channel	No impact.	---	---	---	---
Montecito Storm Channel	Extend RCB into current open, concrete-line channel; no habitat.	36 (390)	0.0036 (0.0090)	85 (910)	0.0085 (0.0209)
Bixby Storm Channel	Extend RCB into current open, concrete-line channel; no habitat.	1,400 (15,000)	0.1394 (0.3444)	1,500 (16,000)	0.1486 (0.3673)
Federal Storm Channel	No impact.	---	---	---	---
Bolsa Chica Channel	No impact.	---	---	---	---
Anaheim-Barber City Channel	No impact.	---	---	---	---
Bolsa Grande Storm Channel	No impact.	---	---	---	---
Westminster Channel	No impact.	---	---	---	---
Taft Storm Drain	No impact.	---	---	---	---
Newhope Channel	Enclose open, concrete-lined channel in RCB at Pacific Electric Arterial; no habitat.	---	---	---	---
East Garden Grove-Wintersburg Channel	<ul style="list-style-type: none"> Extend RCB into current open, concrete-lined channel at SR-22; no habitat. Extend RCB into current open, concrete-lined channel at Pacific Electric Arterial; no habitat. 	97 (1,080)	0.0101 (0.0248)	390 (4,200)	0.0390 (0.0964)
Santa Ana River	<ul style="list-style-type: none"> Lengthen 10 existing piers and construct 6 new piers at SR-22. Construct 3 new piers at Pacific Electric Arterial. 	538.2 (5,794)	0.0523 (0.1294)	16,477.5 (177,368)	1.6479 (4.0718)
Santiago Creek	<ul style="list-style-type: none"> Lengthen 1 existing pier. Lengthen 4 existing piers at SR-55 	208.1 (2,241)	0.0208 (0.0514)	8,368.7 (90,083)	0.8369 (2.0680)
La Veta Storm Channel	Extend RCB into current open, concrete-line channel; no habitat.	587.6 (6,325)	0.0588 (0.1452)	792.0 (8,525)	0.0792 (0.1957)
El Modena Storm Channel	No impact.	---	---	---	---

Note: Lewis Channel, an open concrete-lined channel in Garden Grove, is not a "water of the United States," based on USACOE criteria (Vega, June 1, 2000). This channel, which is adjacent and parallel to SR-22, would be enclosed in a reinforced concrete box culvert located in the widened SR-22 right-of-way. The area of permanent impacts would be 5,160 square meters (55,500 square feet) or 0.5156 hectare (1.274 acres), but because the channel is non-jurisdictional, a Section 404 permit would not be required. No habitat is present within this concrete-lined channel.

D. REDUCED BUILD ALTERNATIVE

The Reduced Build Alternative includes overcrossings of, or is adjacent to, a number of drainages that are waters of the United States. The majority of these drainages are concrete-lined and therefore do not contain sensitive biological resources. Table 4.4-2 shows potential area of impact for each of these drainages.

**Table 4.4-2
POTENTIAL IMPACTS TO WATERS OF THE UNITED STATES
REDUCED BUILD ALTERNATIVE**

Water of the U.S.	Impact Description (RCB = reinforced concrete box)	Permanent Impacts		Temporary Impacts	
		Meters (Sq.Ft.)	Hectares (Acres)	Meters (Sq.Ft.)	Hectares (Acres)
Los Alamitos Channel	No impact.	---	---	---	---
Katella Storm Channel	No impact.	---	---	---	---
Kempton Storm Channel	No impact.	---	---	---	---
Montecito Storm Channel	Extend RCB into current open, concrete-line channel; no habitat.	36 (390)	0.0036 (0.0090)	85 (910)	0.0085 (0.0209)
Bixby Storm Channel	Extend RCB into current open, concrete-line channel; no habitat.	1,400 (15,000)	0.1394 (0.3444)	1,500 (16,000)	0.1486 (0.3673)
Federal Storm Channel	No impact.	---	---	---	---
Bolsa Chica Channel	No impact.	---	---	---	---
Anaheim-Barber City Channel	No impact.	---	---	---	---
Bolsa Grande Storm Channel	No impact.	---	---	---	---
Westminster Channel	No impact.	---	---	---	---
Taft Storm Drain	No impact.	---	---	---	---
Newhope Channel	No impact.	---	---	---	---
East Garden Grove-Wintersburg Channel	Extend RCB into current open, concrete-line channel; no habitat.	80 (900)	0.0084 (0.0207)	195 (2,100)	0.0195 (0.0482)
Santa Ana River	Lengthen 5 existing piers and construct 6 new piers.	224.1 (2,412)	0.0224 (0.0554)	13,278.8 (142,936)	1.3280 (3.2814)

Note: Lewis Channel, an open concrete-lined channel in Garden Grove, is not a "water of the United States," based on USACOE criteria (Vega, June 1, 2000). This channel, which is adjacent and parallel to SR-22, would be enclosed in a reinforced concrete box culvert located in the widened SR-22 right-of-way. The area of permanent impacts would be 5,160 square meters (55,500 square feet) or 0.5156 hectare (1.274 acres), but because the channel is non-jurisdictional, a Section 404 permit would not be required. No habitat is present within this concrete-lined channel.

Projects that include physical modification of a "water of the United States" must generally comply with Section 404 of the Clean Water Act under the jurisdiction of the Corps. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Section 404 regulates activities that result in discharge of dredged, fill, or excavated material into "waters of the United States." This generally includes any waterway, intermittent stream, man-made wetland, or reservoir. Although the study area supports no wetlands that would be directly affected by the Reduced Build Alternative (see below), this alternative would result in modification of some soft-bottom channelized drainages. Therefore, the project will need to comply with Section 404 of the Clean Water Act to address impacts on "waters of the United States." Section 404 permits will be required for the crossings identified below, but coverage under existing Nationwide Permit 14, Linear Transportation Crossings, is anticipated because permanent impacts would not exceed the thresholds for this nationwide permit (0.2 hectare or 0.5 acre), as shown in Table 4.4-2.

Section 401 of the federal Clean Water Act requires that for each permit or license issued by a federal agency, the state is to provide certification that water quality standards and the use of the

water will not be impaired by issuance of the federal permit. The state may grant, grant with conditions, waive, or deny certification. Most certifications are issued for a Section 404 permit, so an application for a Section 401 certification is generally filed concurrently with the Section 404 permit application (or request for coverage under a nationwide permit). The state's Regional Water Quality Control Boards (RWQCBs) issue the certifications. The applicable RWQCB may approve the certification application, passively waive certification by taking no action (generally within 60 days, although extensions are possible), or deny the certification if it is unable to find that the project will comply with water quality standards or other applicable requirements. If the certification is denied, the USACOE cannot issue a Section 404 permit or cover the project under an existing nationwide permit. Because the Reduced Build Alternative would require coverage under existing Nationwide Permit 14, Linear Transportation Crossings, a Section 401 certification would be required.

Thresholds of Significance for CEQA:

- Erosion and runoff that may affect waters of the United States

A. NO BUILD ALTERNATIVE

The No Build Alternative would have no impacts to waters of the United States.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would have no impacts to waters of the United States.

C. FULL BUILD ALTERNATIVE

The Full Build Alternative includes overcrossings of, or is adjacent to, a number of drainages that are waters of the United States. The majority of these drainages are concrete-lined and therefore do not contain sensitive biological resources. See Table 4.4-1 details on potential impacts to waters of the United States for each of these drainages. In the table, permanent impacts refer to the impacts related to permanent changes in the waters of the United States, such as from new or altered structures. Temporary impacts refer to the construction-related impacts such as access roads.

Although the study area supports no wetlands that would be directly affected by the Full Build Alternative (see below), this alternative would result in modification of some soft-bottom channelized drainages. Therefore, the project will need to comply with Section 404 of the Clean Water Act to address impacts on "waters of the United States." Section 404 permits will be required for the crossings identified below, but coverage under existing Nationwide Permit 14, Linear Transportation Crossings, is anticipated because permanent impacts would not exceed the thresholds for this nationwide permit (0.2 hectare or 0.5 acre), as shown in Table 4.4-1, resulting in less than significant impacts.

D. REDUCED BUILD ALTERNATIVE

The Reduced Build Alternative includes overcrossings of, or is adjacent to, a number of drainages that are waters of the United States. The majority of these drainages are concrete-lined and therefore do not contain sensitive biological resources. Table 4.4-2 shows potential area of impact for each of these drainages.

Although the study area supports no wetlands that would be directly affected by the Reduced Build Alternative (see below), this alternative would result in modification of some soft-bottom channelized drainages. Therefore, the project will need to comply with Section 404 of the Clean Water Act to address impacts on "waters of the United States." Section 404 permits will be re-

quired for the crossings identified below, but coverage under existing Nationwide Permit 14, Linear Transportation Crossings, is anticipated because permanent impacts would not exceed the thresholds for this nationwide permit (0.2 hectare or 0.5 acre), as shown in Table 4.4-2, resulting in less than significant impacts.

4.4.2 Wetlands Within the Study Area

A. NO BUILD ALTERNATIVE

The No Build Alternative would not include construction other than that which is addressed in other environmental documents therefore, no additional impacts to wetlands would occur.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would not include any major capital improvements to SR-22. No impacts to wetlands would occur.

C. FULL BUILD ALTERNATIVE

The study area for the Full Build Alternative supports a total of 0.629 hectare (1.55 acres) of wetlands. None of these wetlands are within the proposed Full Build Alternative right-of-way, but the wetlands could be affected by runoff or erosion from the project area during construction activities. These wetlands are located along Los Alamitos Channel in the I-405/I-605 Connector segment and adjacent to the SR-22 crossing over Santiago Creek in the SR-22 Mainline segment.

D. REDUCED BUILD ALTERNATIVE

The study area for the Reduced Build Alternative supports 0.615 hectare (1.52 acres) of wetlands. None of these wetlands are within the proposed Reduced Build Alternative right-of-way, but the wetlands could be affected by runoff or erosion from the project area during construction activities. These wetlands are located along Los Alamitos Channel in the I-405/I-605 Connector segment.

Thresholds of Significance for CEQA:

- Erosion and runoff that may affect wetlands

A. NO BUILD ALTERNATIVE

The No Build Alternative would have no impacts to wetlands.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would have no impacts to wetlands.

C. FULL BUILD ALTERNATIVE

The study area for the Full Build Alternative supports a total of 0.629 hectare (1.55 acres) of wetlands. None of these wetlands are within the proposed Full Build Alternative right-of-way, but the wetlands could be affected by runoff or erosion from the project area during construction activities. These wetlands are located along Los Alamitos Channel in the I-405/I-605 Connector segment and adjacent to the SR-22 crossing over Santiago Creek in the SR-22 Mainline segment. Implementation of appropriate erosion or runoff controls measures will result in less than significant impacts.

D. REDUCED BUILD ALTERNATIVE

The study area for the Reduced Build Alternative supports 0.615 hectare (1.52 acres) of wetlands. None of these wetlands are within the proposed Reduced Build Alternative right-of-way, but the wetlands could be affected by runoff or erosion from the project area during construction activities. Implementation of appropriate erosion or runoff controls measures will result in less than significant impacts.

4.4.3 Mitigation**A. NO BUILD ALTERNATIVE**

None proposed.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

None proposed.

C. FULL BUILD ALTERNATIVE

WET-FB-1. Potential impacts to the wetlands will be mitigated by the implementation of appropriate erosion or runoff controls, to be designed and constructed as part of the widening of the roadway along the west side of the I-405/I-605 Connector segment and by the widening of the SR-22 crossing over Santiago Creek in the SR-22 Mainline segment. These controls will include berms to channel runoff to a collection area(s).

See also HYD-FB-2 in Section 4.2.4C.

D. REDUCED BUILD ALTERNATIVE

WET-RB-1. Potential impacts to the wetlands will be mitigated by the implementation of appropriate erosion or runoff controls, to be designed and constructed as part of the widening of the roadway along the west side of the I-405/I-605 Connector segment. These controls will include berms to channel runoff to a collection area(s).

See also HYD-RB-2 in Section 4.2.4D.

4.4.4 Residual Impacts After Mitigation**A. NO BUILD ALTERNATIVE**

None.

B. TSM/EXPANDED BUS SERVICE ALTERNATIVE

None.

C. FULL BUILD ALTERNATIVE

Less than substantial impact.

D. REDUCED BUILD ALTERNATIVE

Less than substantial impact.